

AMERICAN JOURNAL OF MATHEMATICS

FOUNDED BY THE JOHNS HOPKINS UNIVERSITY

EDITED BY

WEI-LIANG CHOW
THE JOHNS HOPKINS UNIVERSITY

PHILIP HARTMAN
THE JOHNS HOPKINS UNIVERSITY

R. BOTT
HARVARD UNIVERSITY

HYMAN BASS
COLUMBIA UNIVERSITY

WITH THE COÖPERATION OF

M. ATIYAH
J.-I. IGUSA
K. KODAIRA

T. MATSUSAKA
G. D. MOSTOW
L. NIRENBERG
D. C. SPENCER

S. SMALE
S. STERNBERG
A. WEIL

PUBLISHED UNDER THE JOINT AUSPICES OF
THE JOHNS HOPKINS UNIVERSITY
AND
THE AMERICAN MATHEMATICAL SOCIETY

VOLUME XCIII

1971

THE JOHNS HOPKINS PRESS
BALTIMORE, MARYLAND 21218
U. S. A.

THE UNIVERSITY OF CHICAGO

INDEX

	PAGE
ALEXANDER, H. Polynomial approximation and hulls in set of finite linear measure in C^n ,	65
BARTON, CHARLES M. Tensor products of ample vector bundles in characteristic p ,	429
BERGER, MELVYN S. Periodic solutions of second order dynamical systems and isoperimetric variational problems,	1
BROTHERS, JOHN E. Stokes' theorem II,	479
CARPENTER, R. L. Continuity of derivations in F -algebras,	500
CHEN, BANG-YEN. On the total curvature of immersed manifolds, I: an inequality of Fenchel-Borsuk-Willmore,	148
COATES, J. The transcendence of linear forms in $\omega_1, \omega_2, \eta_1, \eta_2, 2\pi i$,	385
CRANDALL, M. G. and T. M. LIGGETT. Generation of semi-groups of nonlinear transformations on general Banach spaces,	265
EAGON, JOHN A. See M. Hochster and John A. Eagon, page 1020.	
FEFFERMAN, C. and E. M. STEIN. Some maximal inequalities,	107
FISHER, MICHAEL J. Imaginary powers of the indefinite integral,	317
FISHER, MICHAEL J. Purely imaginary powers of certain differential operators, I,	452
GERVER, JOSEPH. More on the differentiability of the Riemann function,	33
GROSS, KENNETH I. The dual of a parabolic subgroup and a degenerate principal series of $Sp(n, C)$,	398
HARIS, STEPHEN J. Some irreducible representations of exceptional algebraic groups,	75
HARRIS, LAWRENCE A. The numerical range of holomorphic functions in Banach spaces,	1005
HARTMAN, PHILIP. Corrigendum and addendum: Principal solutions of disconjugate n -th order linear differential equations,	439
HOCHSTER, M. and JOHN A. EAGON. Cohen-Macaulay rings, invariant theory, and the generic perfection of determinantal loci,	1020
HOLME, AUDUN. Formal embedding and projection theorems,	527
HOWE, ROGER. On Frobenius reciprocity for unipotent algebraic groups of Q ,	163
HSIA, J. S. An invariant for integral equivalence,	867
HUESMOLLER, DALE. The structure of the Hopf algebra $H_*(BU)$ over a $Z_{(p)}$ -algebra,	329
HURD, A. E. Local conditions for equivalence of compact dynamical systems,	742
HURLEY, JAMES F. Some normal subgroups of elementary subgroups of Chevalley groups over rings,	1059
IHARA, YASUTAKA. An invariant multiple differential attached to the field of elliptic modular functions of characteristic p ,	139
JOHNSON, A. A. The automorphisms of unitary groups over a field of characteristic 2,	367
JOHNSON, D. L. Minimal permutation representations of finite groups,	857

	PAGE
JOHNSON, JOSEPH. Extensions of differential modules over formal power series rings,	731
KATZ, NICHOLAS M. On a theorem of Ax,	485
KOSTANT, B. and S. RALLIS. Orbits and representations associated with symmetric spaces,	753
KRIETE, T. L., III and DAVID TRUTT. The Cesàro operator in ℓ^2 is subnormal,	215
KWUN, KYUNG WHAN. Transfer homomorphisms of Whitehead groups of some cyclic groups,	310
LIGGETT, T. M. See M. G. Crandall and T. M. Liggett, page 265.	
LIPMAN, JOSEPH. Stable ideals and Arf rings,	649
MARTIN, JOHN C. Substitution minimal flows,	503
MASKIT, BERNARD. Self-maps on Kleinian groups,	840
MOSTOW, G. D. Some applications of representative functions to solv-manifolds,	11
OLSEN, CATHERINE. A structure theorem for polynomial compact operators,	686
ONO, TAKASHI. On Kelvin's principle,	700
PARRY, WILLIAM. Metric classification of ergodic nilflows and unipotent affines,	819
PUTNAM, C. R. The spectra of completely hyponormal operators,	699
RALLIS, S. See B. Kostant and S. Rallis, page 753.	
RATLIFF, L. J. JR. Characterizations of catenary rings,	1070
RENAUD, P. F. General ergodic theorems for locally compact groups,	52
RICHARDSON, LEONARD F. Decomposition of the L^2 -space of a general compact nilmanifold,	173
ROBERTS, JOEL. Generic projections of algebraic varieties,	191
ROBINSON, R. CLARK. Generic one parameter families of symplectic matrices,	116
SCHULTZ, REINHARD. Semifree circle actions and the degree of symmetry of homotopy spheres,	829
SEELEY, ROBERT. Norms and domains of the complex powers A_B^s ,	299
SMITH, LARRY. On realizing complex bordism modules II, Applications to the stable homotopy groups of spheres,	226
STEIN, E. M. See C. Fefferman and E. M. Stein, page 107.	
STEIN, MICHAEL R. Generators, relations and coverings of Chevalley groups over commutative rings,	965
STØRMER, ERLING. On infinite tensor products of von Neumann algebras,	810
THEDY, ARMIN. On rings with completely alternative commutators,	42
TRUTT, DAVID. See T. L. Kriete, III and David Trutt, page 215.	
WAGONER, J. B. On K_2 of the Laurent polynomial ring,	123
WULBERT, DANIEL E. Nonlinear approximation with tangential characterization,	718
WULBERT, DANIEL. Uniqueness and differential characterization of approximations from manifolds of functions,	350
ZARISKI, OSCAR. General theory of saturation and of saturated local rings I,	573
ZARISKI, OSCAR. General theory of saturation and the saturated local rings II,	872

